6720-TI-161

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May 6, 2002

HAND DELIVERED

Lynda L. Dorr
Secretary
Wisconsin Public Service Commission
610 North Whitney Way, 2nd Floor
Madison, WI 53705-2729

Dear Ms. Dorr:

Re: Investigation Into Ameritech Wisconsin's Unbundled Network Elements
Docket No. 6720-TI-161

Pursuant to Order Point 2 of the Final Order dated March 22, 2002, enclosed are the following documents and materials:

1. CLEC Compliance Filing of Collocation Cost Model, including:
   a. Confidential Exhibit 1: *Collocation Cost Model Compliance Modifications*;
   b. Exhibit 2: *Ameritech Compliance CCM Output*;
   c. Confidential Exhibit 3: *Ameritech Compliance CCM;* and
   d. Confidential Exhibit 4: *Ameritech COBO Project Estimates*;

2. Confidentiality Request forms; and

3. Affidavit of Stephanie L. Mott.

Due to its voluminous nature, only an electronic version of confidential Exhibit 3: *Ameritech Compliance CCM* will be provided to staff and to Mr. Jermaine.

Upon the filing of these documents, please return a file-stamped copy of this letter to our messenger.

MFC
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If you have any questions concerning this matter, please feel free to contact Clark Stalker at 312-230-2653 or me.

Yours very truly,

Peter L. Gardon

Peter L. Gardon

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Encs.

cc Mr. James F. Jermain (w/encs.)
Mr. Clark M. Stalker (w/encs.)
Mr. Niles Berman (w/encs.)

Docket 6720-TI-161

CLEC Compliance Filing of Collocation Cost Model

May 6, 2002

Introduction and Overview

On March 22, 2002, the Commission issued its Final Order in Docket No. 6720-TI-161. This Final Order directed that the AT&T/WorldCom Collocation Cost Model be used to set collocation prices for Wisconsin CLECs. Moreover, it directed Ameritech to provide specific inputs to the parties that should be incorporated into the Collocation Cost Model. Ameritech partially complied with the requirement to provide its inputs in documents that it provided on April 15, 2002. However, this set of documentation was incomplete because it did not provide important source information regarding the basis for the inputs in Ameritech's earlier filing of its collocation cost studies. Moreover, it failed to comply with two important requirements of the Final Order: (1) Ameritech failed to provide the supporting analysis for Final Order Finding of Fact No. 22 which required Ameritech to "prepare an analysis of the frequency with which each of its proposed security measures is necessary to accommodate collocators, and to develop forward-looking security costs that include a frequency of occurrence factor and that are divided among the average number of collocators in a CO;" and (2) Ameritech failed to provide the supporting analysis for Final Order Finding of Fact No. 23, which required Ameritech to "provide a detailed breakdown showing the makeup of its site conditioning costs, to determine the frequency with which those detailed costs will be incurred, and to divide site conditioning costs among the average number of collocators in a CO."

Ameritech subsequently provided additional information on April 25, 2002 that attempted to provide citations to the location in its cost filings where the inputs proposed for the Collocation Cost Model were supported. Further, Ameritech provided documents on May 2, 2002, attempting to support the requirements of the Final Order pertaining to Security and Site Conditioning. Although Ameritech's documentation was helpful, it was still incomplete and did not comply with the requirements of the Final Order particularly as they relate to the frequency analysis that is required or with regard to ensuring that the costs are divided among all collocators. Nonetheless, in an effort to comply with the Commission's Final Order for the CLECs to rerun the Collocation Cost Model with Ameritech's inputs, the CLECs took the information provided by Ameritech and have incorporated Ameritech's interpretation of the Final Order in filing a Compliance Collocation Cost Model.

Approach

The approach that the CLECs have taken is to utilize the information provided by Ameritech supplemented with a review of Ameritech's collocation cost submissions in Docket No. 6720-TI-161 to identify the inputs that should be used in the Compliance Collocation Cost Model. To aid the Commission in following this approach, two documents have been produced. *First*, the

CLECs have produced a Compliance Modifications document (Exhibit 1) that identifies each cell within the Compliance Collocation Cost Model that has been modified, the modified input used, the source for the modification citing to both the Commission's Final Order and to the Ameritech cost study for the input as necessary, and an explanation for the difference with Ameritech's value, if appropriate. While this document is lengthy, it provides a comprehensive listing that should help the parties follow what has been done to the Compliance Collocation Cost Model and explain any differences with Ameritech's proposed inputs. *Second*, the CLECs have produced the actual Compliance Collocation Cost Model as well. This "document" is best viewed electronically, although the rate sheets produced by the Compliance Collocation Cost Model are attached (Exhibit 2). Each cell that has been modified in the Compliance Collocation Cost Model is highlighted in yellow and corresponds to the Compliance Modifications document described previously.

Before reviewing some of the details of the differences between Ameritech and the CLECs, please note that the changes proposed by the CLECs are not always to lower Ameritech's proposed inputs. In several cases, the CLEC modifications raise Ameritech's proposed inputs. The reasons for this vary. However, in general, the nature of Ameritech's understatement was either related to not understanding how the Collocation Cost Model approaches certain elements (e.g., power) or because Ameritech overlooked portions of its inputs that should be incorporated into the Collocation Cost Model (e.g., planning). Further, the CLECs have implemented the inputs fairly, including those ordered by the Commission that were substantially higher than either the CLECs or Ameritech requested (e.g., the Occupancy Adjustment Factor set at 50 percent).

The bottom line is that the CLEC filing of the Compliance Collocation Cost Model represents a comprehensive and fair interpretation of the Final Order. In comparing the modifications made by Ameritech to those made by the CLECs, there are several significant gaps that will be discussed briefly below to facilitate the Commission understanding the issues and providing guidance on resolving any differences.

Interconnection Cabling

One of the most troubling modifications proposed by Ameritech is the removal of interconnection cabling as a collocation element that can be purchased by collocators. Ameritech reflected this change in position by simply making a notation on the output sheets of the Collocation Cost Model indicating the following: "AIT ACTIVITY TIME AND MATERIAL COSTS ARE ZERO FOR INTERCONNECTION CABLES. CLEC PLACES OWN CABLES." There are several significant problems with Ameritech's position.

First, this approach is completely inconsistent with Ameritech's filing in Docket No. 6720-TI-161. Ameritech's collocation cost filing *included* Ameritech's providing the interconnection cabling. This can be seen from the output sheets produced by Ameritech in its cost study filing that noted that Ameritech's costs "Includes *cable* and rack *from distribution frame to collocation area.*"[1] This point is important because if Ameritech had made clear that it was not offering interconnection arrangements (including the cabling) during the cost proceeding, the CLECs

[1] *See* "CCT-Wisconsin (6-7-00)" Workbook, "PC Summary" Worksheet, Cell F79 (emphasis added).

would have aggressively responded to this change of policy. However, Ameritech never made such a proposal in its cost filing, only revealing this change of policy in its filing of proposed inputs for the Compliance Collocation Cost Model. This is not timely and should be rejected by the Commission.

Second, in discussing this issue with Ameritech, Ameritech indicates that this change of policy should be clear because its collocation cost study, which should be the source for material costs and activity times consistent with the Final Order, does not contain material costs or activity times for interconnection cabling between its distribution frame and the collocation area. However, this is simply not true. Ameritech's cost study clearly contains material costs and activity times for interconnection cabling. In Exhibit 1, in the section documenting inputs for the "Connectivity Element Backup" worksheet to the Compliance Collocation Cost Model, all of these interconnection cabling inputs are documented including the location within Ameritech's cost study where the material costs and activity times are located. In fact, Ameritech's cost study contained comprehensive material and activity time inputs for Voice Grade, DS1, DS3, and fiber interconnection arrangements. There was no gap between what was needed for these inputs into the Compliance Collocation Cost Model and what was available in Ameritech's cost submission to this Commission. Ameritech simply wanted to change its policy regarding the offering of these arrangements.

Third, the Commission confirmed that it viewed the distances and the associated costs implicit in the forward-looking collocation arrangement in the Collocation Cost Model to be the basis for setting collocation costs. As such, the 165 feet (that is the average distance in the Collocation Cost Model between the Ameritech distribution frame and the collocation arrangement) has been ordered by the Commission as the distance over which interconnection arrangement costs should be established. Ameritech is attempting to undermine this aspect of the Final Order with its change of policy because it wants CLECs to pay for the interconnection cabling on an individual case basis (1) regardless of how far the interconnection arrangement may span within the Ameritech central office, and (2) rather than having definitive prices set as a result of this cost proceeding. In short, Ameritech should not be permitted to undermine the intent of the Final Order with a change of policy.

Fourth, it is important to understand that Ameritech's parent company, SBC, has attempted this same change of policy regarding the availability of interconnection cabling in other states, including Texas, Missouri, Oklahoma, Kansas, and Nevada. The timing of the Wisconsin cost proceeding was such that Ameritech filed its proposed costs prior to SBC attempting to implement this policy change. However, in all of these states, SBC's policy change of refusing to provide the cables has been stopped. SBC is providing interconnection cabling as part of its collocation offerings in all of these states. The bottom line is that Ameritech should not be permitted to change its policy given that this was not Ameritech's position at the time of filing its cost case in Wisconsin, is inconsistent with the inputs contained in its cost submission in Wisconsin, is inconsistent with the Final Order, and has been consistently rejected in other SBC states.

DC Power Delivery

Ameritech's cost submission in Docket No. 6720-TI-161 contained cost to provide "Power Provisioning" which included "Cable, Rack, BDFB, (and) Grounding."[2] There is no information in the Ameritech cost study as to the amperage capacity of each of these power provisioning cables. Further, I have looked back through the testimony submitted by the parties and the capacity of these cables was never discussed. The only issue was whether the BDFB should be included in this nonrecurring charge or separated out as part of the recurring charge for DC power. Ultimately, the Final Order shows that the BDFB should be part of the recurring charge for DC power.

The problem now is that Ameritech has decided that the capacity of the cable cost in its cost study is for only five amps of DC power. There is no basis for this extremely small capacity assumption. Typically, collocators order power in increments of anywhere from 20 amps (a minimum increment) up to around 100 amps per feed. As such, even if Ameritech has "won" its collocation cost proposal in Wisconsin, it would not have been reasonable to interpret that its costs were only for five amp power feeds. It would have been entirely impractical for CLECs to order power in these increments or for Ameritech to provision power in these increments. Even a single piece of equipment such as a SONET Add-Drop Multiplexer requires more than five amps of power and would have made it impossible to provision power between the BDFB and the collocation arrangement.

Ameritech has used this faulty assumption of power cables only providing five amps of power and has multiplied the cost by four to translate the cost to that for 20 amps (which Ameritech has agreed to offer as part of the Collocation Cost Model). As an aside, Ameritech has refused in its inputs to offer the other increments of power included in the Collocation Cost Model of 40 amps or 100 amps. Nonetheless, power cable costs do not work in the linear way that Ameritech has proposed. Cables necessary to support 20 amps of power over a certain distance do not cost four times more than cables to support five amps of power over the same distance. The cables will be larger (therefore costing more) but will not be four times larger or four times more costly (they will be proportionately much less). Further, it does not take four times as long to install 20 amp cables as to install five amp cables. The relationship Ameritech has proposed is nonsensical.

The reality is that Ameritech's cost study does not really contain costs for DC power delivery cables in a manner that can be used in the Collocation Cost Model. In fact, if the CLECs had used the costs that do exist in Ameritech's cost study, they would have produced much lower charges than what are in the Collocation Cost Model. However, because there is really not an apples-to-apples comparison between Ameritech's proposed inputs and those that are needed for the Collocation Cost Model, the most sensible thing to do is use the inputs found already in the Collocation Cost Model. These values were provided from vendor quotes. Moreover, they actually produce higher costs than using the values found in Ameritech's cost study.

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2 *See* "CCT-Wisconsin (6-7-00)" Workbook, "PC Summary" Worksheet, Cells A26 and B27.

DC Power Consumption

DC Power Consumption also produces some unusual issues related to applying Ameritech's inputs in the Collocation Cost Model. Specifically, Ameritech's cost model developed DC Power Consumption costs on a "fuse" amp basis. The CLECs proposed that DC Power costs should be based on a "load" amp basis. This is what is reflected in the Collocation Cost Model. The Final Order is silent on this specific issue. However, the Commission did order the use of the Collocation Cost Model and therefore, the CLECs reasonably believe that this means applying DC power on a "load" amp basis.

The problem is that Ameritech has not properly reflected either position in its inputs to the Collocation Cost Model. Ameritech left the AC rate calculations as if they were on a "load" amp basis. However, Ameritech incorporated its DC power investment on a "fuse" amp basis. The resulting rate proves to be unusable. The CLECs have reconciled all inputs for AC usage, DC power plant investment, and BDFB investment on a "load" amp basis. This actually leads to the CLEC entry for DC power being higher than that entered by Ameritech. It is necessary to do this to ensure that the result is consistent with the application of the cost.

Finally, Ameritech's proposed entry for the BDFB is not usable. Ameritech's cost study identifies the installed cost for the BDFB and the number of fuse positions on the BDFB. Ameritech's cost study does not identify the capacity of the BDFB in terms of amperage (which is required for use in the Collocation Cost Model). Ameritech again made assumptions regarding the capacity of the BDFB that are derived from its belief that each fuse on the BDFB will only deliver five amps of DC power. Again, this is not how BDFBs are used today by Ameritech. This five amp assumption should not be used to derive the cost for the BDFB.

Because the BDFB in Ameritech's cost study does not have an amperage associated with it, the CLECs made a reasonable assumption of 800 amps for the BDFB. BDFBs in incumbent installations typically range between 400 amps and 1200 amps. An 800 amp BDFB reflects the midpoint for this calculation. Ameritech assumed 400 amps for its calculation. (Please note that in Texas, SBC used a 1200 amp BDFB in its cost submission so the upper end is not unreasonable.) There is nothing definitive in the Ameritech cost study to identify the capacity of the BDFB. It is self-serving for Ameritech to assume 400 amps because this leads to the maximum investment per amp possible. The CLECs' use of an 800 amp BDFB leads to a more accurate result.

Common (Shared) Collocation

There are numerous problems with Ameritech's proposed inputs for Common Collocation. The core of these problems is that Ameritech has simply not implemented the necessary changes in the Collocation Cost Model to reflect the Final Order requirement that Shared Collocation be available in 25 square foot increments. There were many changes in the Compliance Collocation Cost Model that were necessary to implement this change because previously the Collocation Cost Model priced Shared Collocation on a linear foot basis as opposed to a square foot basis. Nonetheless, the CLECs have made the necessary changes to implement this Final Order requirement, but it leads to significantly different inputs than those proposed by Ameritech.

Adjacent On Site Collocation

Like Shared Collocation, Ameritech virtually ignored the requirement to implement Adjacent On Site Collocation consistent with the Final Order requirement that cabling distances and splicing be priced on a per foot and per splice basis, respectively. Ameritech set some of the racking distances to one foot in the Collocation Cost Model to "unitize" these costs. However, Ameritech repeatedly missed costs that would also have to be unitized such as cable hole costs, splicing charges, and the cable itself in its modifications to the Collocation Cost Model. The CLECs' Compliance Collocation Cost Model reflects all of these changes to implement the Final Order and modifies the Adjacent On Site Collocation rate sheet to reflect the values on a per foot or per splice basis as required.

Site Conditioning

Ameritech's proposed Site Conditioning costs simply do not reflect the costs that are contained in its backup work papers. To develop the costs for Site Conditioning, Ameritech has taken its costs that it claims were derived for a 50 square foot cage and applied this repeatedly to derive the cost for the Collocation Cost Model which is a 550 square foot area built at one time. Ameritech has assumed that the 50 square foot cost must be applied four times for the four collocation cages contained in the 550 square foot area plus seven applications of the "additional" 50 square foot site conditioning cost for the remaining 350 square feet in the collocation cage. This amounts to an enormous Site Conditioning cost for the 550 square foot collocation arrangement – actually greater than if the Commission had adopted Ameritech's cost model.

The work papers that Ameritech provided that show how its Site Conditioning costs are derived indicate a totally different picture of the costs for Site Conditioning. *First*, the costs for site conditioning are not differentiated between an initial 50 square feet and an additional 50 square feet. Ameritech simply created this arrangement by taking an initial cost (which is not supported in the work papers) and dividing it in half. However, the costs identified in Ameritech's cost study are for an entire area – not 50 square feet in any form (initial or additional). *Second*, the information in Ameritech's site conditioning cost study shows that virtually all of the costs are for an entire collocation area – just as is assumed in the Collocation Cost Model. The amount of area that Ameritech "conditions" varies by central office, but the costs are for the entire area – not for a small subset to be attributed to a particular CLEC. The bottom line is that the CLECs took the information provided by Ameritech that showed the costs for site conditioning and divided this cost by the average area conditioned to develop an investment per square foot of conditioned space. This value, as further modified below, was used in the CLEC Compliance Collocation Cost Model.

The final modification that was incorporated was to apply a frequency that the cost was applied. The CLECs attempted to obtain information from Ameritech on how frequency was incorporated into the Ameritech costs. Ameritech has not provided this information. Nonetheless, Ameritech's assumption is that site conditioning costs apply in every central office. The Commission's Order wanted Ameritech to demonstrate the real frequency that the costs actually

occur. In lieu of this missing information, the CLECs have assumed a 50 percent frequency and adjusted the costs described above with this factor.

Security

As with Ameritech's Site Conditioning costs, Ameritech has not complied with the Commission Order regarding the details of the security costs and the frequency with which those costs must be applied. Moreover, the limited information that Ameritech did provide regarding frequency conflicts with the Commission's instructions that costs for various forms of security should not unnecessarily be duplicated. Specifically, the Commission ordered that if video surveillance is used, other forms of security such as computer tracking would not be necessary. Ameritech's restatement does not reflect this requirement of the Final Order nor does it reflect the frequency of occurrence that the Commission required.

The same document that Ameritech provided that defines the Site Conditioning costs also provide details regarding security costs. As with Site Conditioning, Ameritech's Security costs are not incurred per CLEC as Ameritech has asserted, but rather, are incurred per area that is secured. The CLECs have used this information to derive a security investment per square foot to reflect Ameritech's own data on the cost when security costs are required. Further, because Ameritech has not provided data on the frequency with which these costs will be incurred as required by the Final Order, the CLECs have used a 50 percent factor to adjust the costs that come from Ameritech's work papers.

Other Input Differences

There are numerous other differences between Ameritech's proposed inputs and those that have been used by the CLECs. All of these differences are noted in Exhibit 1 along with an explanation as to why the CLECs used a different value. As reflected earlier, in some cases these changes increase values proposed by Ameritech. In some cases, these changes decrease values proposed by Ameritech. The CLECs' purpose was only to implement the requirements of the Commission's Final Order. The memo will not outline explanations for all of these differences here, but the CLECs are prepared to discuss these differences with Ameritech or the Commission Staff as appropriate.

Summary

The Compliance Collocation Cost Model reflects the CLECs best efforts at complying with the Final Order. The results of the Compliance Cost Model are reflected in Exhibit 2. These are the rates that the CLECs believe should be ordered by the Commission consistent with its Final Order. Exhibit 3 is the actual Compliance Collocation Cost Model showing all of the changes implemented in the model. Finally, Exhibit 4 is the revised Site Conditioning analysis provided by Ameritech that has been restated to be based on a square foot basis consistent with the data contained in Ameritech's analysis.